REMARKS

These remarks are set forth in response to the non-final office action mailed April 8, 2004 (the "Office Action"). As this amendment has been timely filed within the three-month statutory period, neither an extension of time nor a fee is required. Presently, claims 1 through 19 are pending in the Patent Application. In the Office Action, each of claims 1 through 19 have been rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,336,117 B1 to Massarani which had been filed on April 30, 1999 and which issued on January 1, 2002. In response, the Applicants respectfully traverse the rejections on the art and request that the Examiner reconsider the suitability of Massarani as anticipatory art as applied in the Office Action.

Prior to addressing the rejections on the art, a brief review of the Applicants' invention would be appropriate. The Applicants have invented a new, useful and non-obvious database access system, method and apparatus which utilizes a database proxy driver in a layer between an application and an underlying database connectivity driver. As defined in the specification of the Applicants' Patent Application, a database connectivity driver provides a stylized connection between an application computer program and a database. By stylized connection, it is meant that a database link has a formal, published definition. This formal, published definition can identify the interface through which connected application programs can issue data access requests and, in response thereto, receive database content through the database link. Two contemporary database connectivity drivers include drivers implementing open database connectivity (ODBC) and Java database connectivity (JDBC).

In accordance with the Applicants' invention, a database proxy driver can share a matching interface with the underlying database connectivity driver so that the database proxy driver can act as a proxy to the database connectivity driver without requiring modification of the application. Acting as a proxy to the database connectivity driver, the database proxy driver can perform auxiliary tasks, such as edge based tasks, in addition to processing database connectivity requests. In this way, a coordinated re-tooling of the application or the database server is not required as would have been the case in the prior art where applications deployed at the edge of the network require a direct linkage to the underlying database connectivity driver.

Turning now to the rejections on the art, Massarani relates to search engines for searching content on the World Wide Web. Specifically, as stated in column 2, lines 64-67, an object of the Massarani invention is an improved information retrieval system and method of operation providing consistency between search engine results and content blocking policies. To achieve the foregoing object, Massarani teaches an information retrieval network including a content-indexing search engine having a database and a caching engine coupled between the search engine and the end user. The arrangement of the search and caching engine and the database can be used to implement control policies for blocking undesirable content such that search results are consistent with an end user organization's filtering and blocking policies.

Figure 1 of the Massarani specification illustrates an information retrieval system including a content server having a database, a caching engine implementing blocking policies, and an external search engine. The external search engine further is shown to be coupled to an end user and the content server. Specifically with reference to Figure 1 of Massarani, one or more clients 102, 104 are shown to be coupled to both content servers 120 and a search engine

130 over the Internet 106. To facilitate the connection of the clients 102, 104 to the Internet, a gateway server 124 is provided such that requests to retrieve Internet content can be routed appropriately to specific destinations on the Internet 106, and responses to those requests from the Internet 106 can be routed to the appropriate clients 102, 104. Notably, a caching and content filtering engine 126 can be coupled to the gateway 124 so as to provide both a proxy caching and a content filtering for the benefit of the clients 102, 104.

In the Office Action, the Examiner has cited the content of Figure 1 (and presumably the supporting text of columns 4 and 5 of the Massaroni specification) in support of an anticipation type rejection of all of the Applicants' claims. Independent claim 1 of the Patent Application recites each of a (A) universal database connectivity driver, (B) a database proxy driver registered with the universal database connectivity driver, and (C) a database driven application programmatically linked to the database proxy driver. Notably, the Examiner has stated with specificity that the gateway 124 of Figure 1 is equivalent to (A)—the universal database connectivity driver, that the caching and blocking proxy server 126 of Figure 1 is equivalent to element (B)—the database proxy driver, and that a "program in the database proxy driver 126" is equivalent to (C)--database driven application.

The Applicants note that a database proxy driver as is defined on its face is a database driver which acts as a proxy to another database driver (in this case, the universal database connectivity driver). The Applicants further note that the universal database connectivity driver is defined within the specification of the Patent Application to provide a "stylized connection between an application computer program and a database" such that the database link has a "formal, published definition". In the case of Massaroni, it is quite clear that the gateway is a

proxy server as is used in the context of Web servers today. Nowhere in Massaroni is it suggested that the gateway contains logic for accessing a database like the examples recited in the Patent Application—namely ODBC and JDBC type database connectivity drivers. Moreover, nowhere in Massaroni is it recited or even suggested that one database connectivity driver can act as a proxy to another database connectivity driver. Both terms, however, are recited explicitly in the independent claims 1, 6 and 13.

In respect to independent claims 6 and 13, a method is described in which a "database connectivity request" is received in a first exposed database connectivity method from a database driven application, and is subsequently forwarded to an underlying database connectivity driver through a second exposed method. Importantly, the second exposed method can have a method prototype which matches that of the first exposed database connectivity method. Moreover, at least one auxiliary task can be performed in addition to forwarding the database connectivity request. Such auxiliary tasks can include edge tasks including load balancing and database caching.

The Examiner states that a database connectivity request is shown to originate in the browsers 116 of the clients 102, 104 of Figure 1 of the Massaroni reference. Again, there is no mention or discussion of any "database connectivity request" originating from such browsers—only content requests for Web content as is known in the art. The Examiner further states that the requests are routed from a first exposed method to a second exposed method. Yet, Massaroni teaches no "methods" as the term is known in the art of object oriented and procedural programming (functions) and as is explicitly taught in the UML diagram of Figure 2 of the Applicants' Patent Application. In fact, as no methods are taught in Massaroni, no method

prototypes are shown either. Yet, the explicit language of claims 6 and 13 require that the method prototypes of the first and second exposed methods match. *It is this matching that permits the inter-disposition of the database proxy driver so that the database proxy driver can act as a proxy to the underlying database connectivity driver without requiring a coordinated re-tooling of the database driven application—the crux of the invention!*

In sum, the teachings of Massaroni fall entirely outside the art of edge-deployed processes and database connectivity logic. Consequently, the teachings of Massaroni remain entirely devoid of the notion of disposing a proxy to database connectivity drivers in an edge-deployed server so as to be able to perform auxiliary tasks prior to routing database access requests to the underlying database connectivity driver. For these reasons, the Applicants respectfully request the reconsideration of the Examiner's rejections on the art and a withdrawal of all rejections based upon the Massaraoni reference. The Examiner is encouraged to telephone the undersigned to discuss any matter that would expedite allowance of the present application.

Respectfully submitted,

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1. Amendment
2. Notice of Change of Correspondence Address
3. Transmittal Letter